DOCUMENT RESUME

ED 073 581 EC 051 176

AUTHOR	Gallagher, James J.; And Others
TITLE	Program Planning and Evaluation. First Chance for Children, Vol. 2.
INSTITUTION	North Carolina Univ., Chapel Hill. Technical Assistance Development System.
SPONS AGENCY	Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
PUB DATE	72
NOTE	57p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Educational Trends; *Exceptional Child Education; *Handicapped Children; *Preschool Children; *Program Evaluation; *Program Planning
IDENTIFIERS	First Chance

ABSTRACT

Presented by the Technical Assistance Development System are a planning model for the specification of problems and an evaluation strategy for information collection to implement decision making in the First Chance network of programs for preschool handicapped children. The first chapter offers a planning model in terms of measurable goals, administrative objectives, and outcome objectives for the target populations of children, parents, and decision makers. The second chapter considers evaluation to consist of daily process evaluation and longer term product evaluation based on standardized and nonstandardized measures of administrative and outcome objectives. Major types of data requests by the Bureau of Education for the Handicapped are briefly considered in the third chapter. The final chapter on educational trends suggests that the emphasis on planning and evaluation has arisen out of research such as the J.S. Coleman Report as well as community doubts about the educational non-system's ability to improve. Planning problems such as funding patterns are noted. Also given are a glossary of planning terms and examples of goals and objectives. See EC 050 080 for volume one. (DB)

FILMED FROM BEST AVAILABLE COPY

ED 073581

EC 051 176

first chance for children · vol 2

PROGRAM PLANNING & EVALUATION

james J. GALLAGHER
richard SURLES
audrey HAYES

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

First Chance for Children is a series of monographs published for the First Chance Network. The subject matter is drawn from the knowledge, skills, and techniques of the people that work within the First Chance Network and is collected and published by the Technical Assistance Development System.

In 1968 the enactment of the Handicapped Children's Early Education Act authorized the establishment and operation of model early education projects. Collectively these projects are referred to as the First Chance Network. The responsibility for administering this new program was accepted by the Bureau of Education for the Handicapped, Office of Education. The program is designed to develop and demonstrate effective approaches in assisting handicapped children during their early years and is structured so that other communities can replicate, or adopt, exemplary program components to meet their own needs.

The Bureau of Education for the Handicapped (B.E.H.) has as its overall goal the equalization of educational opportunity for handicapped children by providing the leadership and resources needed to help the handicapped achieve their fullest potential and participate constructively in society to their maximum abilities. The long-range objective of the Handicapped Children's Early Education Program is to stimulate services to all estimated 1,000,000 preschool-aged handicapped children by the end of this decade.

Technical Assistance Development System (TADS) was established in Chapel Hill, N.C. by B.E.H. to serve a supportive function for the network of centers. The role of TADS in this system is to provide assistance in whatever phase of their program the centers request help. Some of the services include identifying and providing consultants, holding small group workshops, collecting and dispensing data about the network, and conferring with individual centers and staffs. Most often, services are offerred to First Chance projects in the areas of program planning and evaluation, intervention programs, community program development, and media and information.

This monograph is distributed pursuant to a grant from the Office of Education, U.S. Department of Health, Education, and Welfare. Grantees undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official Office of Education position or policy.

Copy Editor & Designer — Rosemary Epting
Editor — Pascal Trohani
Artist — Margaret Keith
Typists — Jean Bates, DiAnne Leich

PROGRAM PLANNING AND EVALUATION

PROGRAM PLANNING AND EVALUATION

BY
JAMES J. GALLAGHER
RICHARD C. SURLES
ANDREW E. HAYES

FIRST CHANCE FOR CHILDREN VOL 2

INTRODUCTION

Having found that the planning and evaluation of programs for preschool handicapped children was a major concern in the First Chance Network, the Technical Assistance Development System (TADS) staff sought to develop a systematic informational model for program planning and evaluation which could be utilized by First Chance Projects. It was obvious from the first that this model should be designed around the specific needs and requirements of the projects. Keeping this in mind, the TADS staff made sure that the process of developing materials included: 1) a search for what was being done; 2) a discussion both within TADS and throughout the network of what might be done; 3) the creation of a planning model with structures and examples; and, 4) several field tests of the created materials.

Initially, TADS staff members examined proposals and progress reports prepared for the U.S. Office of Education's Bureau of Education for the Handicapped (B.E.H.) by all First Chance Centers so that the staff members could collect information about models and norms that were being applied. Special attention was given in this examination to the content and structure of the goals and objectives. From this process it was determined that there was a definite lack of consistency in the statements of project plans.

In early January, 1972, Dr. James Gallagher presented a general plan and the rationale for it to B.E.H. which called for TADS to sponsor a series of small modular meetings for project personnel who requested aid in the areas of planning and evaluation.

TADS PLAN FOR TECHNICAL ASSISTANCE DELIVERY

The actual module meeting had one objective; to provide a general orientation for the center directors on the systems model for program planning and evaluation that we would agree upon. This orientation would include a careful listening to the center directors' particular problems and an attempt during the two days to

provide some initial help in the structuring of their objectives.

Once materials to be used in these modular meetings were compiled, a planning structure was developed and an objective matrix, based upon First Chance requirements, was created. Finally, special efforts were made to provide illustrative examples of most of the ideas and concepts to be discussed in the module meetings.

After the first series of planning and evaluation module meetings had been held, the TADS staff realized that future meetings could be organized in such a way as to provide answers to several frequently asked questions about planning and evaluation. Accordingly, materials were reorganized, revised, and coordinated with those questions.

This monograph contains the information presented at those meetings. The purpose of this presentation is *to offer a planning model for the specification of problems and an evaluation strategy for the collecting of information for decision making.* It describes *one* method of response to inquiries about program planning and evaluation. In no way is it intended as a final or an only model but it is an initial attempt to deal with these problems. In fact, it is hoped that the materials will elicit constructive criticism so that further refinement might occur.

This monograph is divided into four chapters in which the following topics are discussed: planning, evaluation, data, and some current trends. The first chapter presents one method of problem-solving with a special emphasis on planning educational programs which can be subjected to evaluation. In the second chapter, attention is given to several techniques of evaluation while the third chapter briefly discusses the data requests made by the Bureau of Education for the Handicapped. Finally, chapter four provides a discussion of educational trends as well as a review of some potential problems with planning and evaluation.

J. J. G.
R. C. S.
A. E. H.

Chapel Hill, North Carolina
Winter 1973

ACKNOWLEDGEMENTS

Prior to the development of this monograph most of the models and examples were used in workshops sponsored by TADS. On separate occasions two members of the TADS Major Advisory Board, Dr. Ernest House of the Center for Instruction Research and Curriculum Evaluation in Urbana, Illinois, and Dr. Nichlos Anastasiow of Indiana University acted as co-directors of these workshops. Their advice and consultation at those times greatly enhanced the content of this work and is greatly appreciated.

CONTENTS

Chapter I	*Planning*	*1*
Chapter II	*Evaluation*	*13*
Chapter III	*Data Collection*	*23*
Chapter IV	*Trends*	*29*
Bibliography		*37*
Appendix A		*39*
Appendix B		*43*
Appendix C		*47*

CHAPTER I

. . . the method, or technique used for planning requires that the planner determine the various problems, the elements of each problem, and how each element effects the other components of the situation.

. . . to gain some idea of effectiveness one must state specific intentions which include measurable indices and time limits. This can be accomplished by stating objectives. . . .

. . . assumption is then made that if a positive evaluation of the specific objective results, then the project is in the process of meeting its goal.

PLANNING

WHAT IS PLANNING AND HOW IS IT DONE?

Planning, as defined by TADS, is a conceptual scheme for a systemmatic, problem-solving attack. Moreover, the method, or technique, used for planning requires that the planner determine the various problems, the elements of each problem, and how each element effects the other components of the situation.

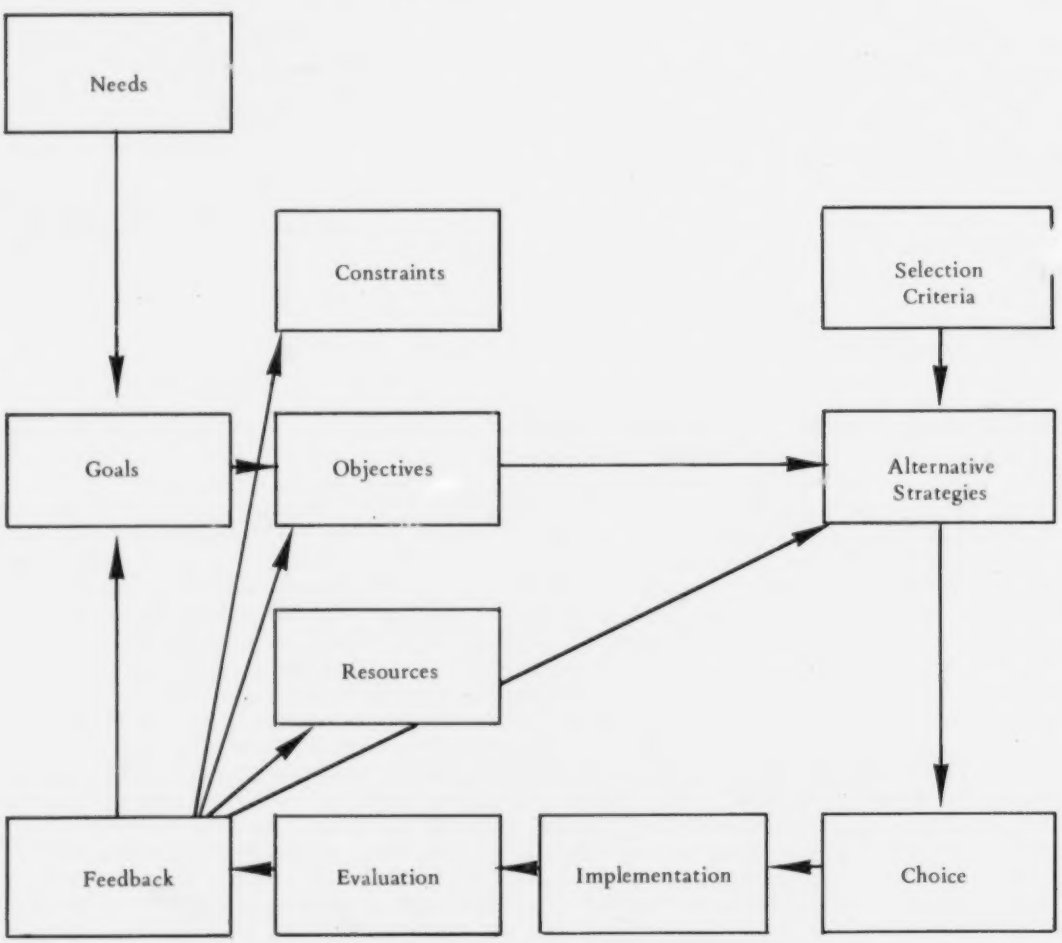
To aid planners in this process, a procedural model for planning was designed, a matrix of subject areas was created, and examples of how one might use this information were developed. Special attention was given to the development of a precise language for speaking about planning. In this way, by specifying one model and one language, a consistent reference-point will exist for discussing data and programs. This model, presented in Figure 1 (page 2). contains some elements of planning that a project director or planner can use while developing programs for a target group such as handicapped children, parents, or decision-makers.

The elements of this model are all inter-related. Needs alert us to potentials for change and generate goals. Goals require specified objectives which can only be met or realized within the boundaries of resources balanced by constraints. Strategies for reaching objectives, selected from alternative approaches, lead to a choice of action, an implementation activity, an evaluation of the success of the strategy, and feedback. This feedback of evaluation data helps to adjust goals, improve resources, sharpen objectives or reduce constraints.

In our day-to-day lives most of us do not plan this systematically. For example, someone who has been trained in deaf education and who has been working with older children may decide to work with younger children because he has become impressed with the value of early education. In this example, this individual enters the planning process having already determined the "alternative strategy", "selection of criteria" and "choice" slots in the model. The problem-solving approach in this case would be to define the parameters of the other seven elements in the planning model.

FIGURE 1

PROGRAM PLANNING AND EVALUATION MODEL



The following example, which describes how a project director might evaluate his project by using the model, can serve to demonstrate what the planning variables are and how they can be utilized. While the example focuses on evaluation, one can analyze problems such as how to select children for programs, how to staff, how to design a curriculum, or how to find additional funds by using the model.

EXAMPLE OF MODEL

NEED: An evaluation plan must be developed and carried out.

GOAL: The plan must meet B.E.H.'s requirements and must provide information to the public about the effectiveness of the program.

OBJECTIVES: To complete the evaluation plan by September 1

To begin collecting data by September 15

To complete data collection by April 30

To complete the data analysis and to file a final report with B.E.H. by June 1

To prepare a brief report for public dissemination that will outline the successes of the project

CONSTRAINTS: Budget of $2,000.00 for evaluation.

Teachers are reluctant to participate in an evaluation.

No one on the staff is familiar with data analysis involving statistics.

RESOURCES: Budget of $2,000.00 for evaluation

A firm can provide consultative assistance in evaluation.

A college in town has graduate students who could help with the data analysis.

An evaluation consultant will help develop the plan.

ALTERNATIVE STRATEGIES: The project director hires a consulting firm to develop and carry out evaluation plan.

The director seeks an additional staff person who would devote one-fourth of his time to evaluation.

The director attends workshops on evaluation and develops plan.

The director uses the staff in conjunction with the consultant.

SELECTION OF CRITERIA: The consulting firm charges $1,700.00 to collect and analyze data.

The director wants to allocate at least $500.00 for printing and dissemination of data, but could get by with $300.00.

The consultant says that he will set up the plan (objectives and evaluation methods) and provide graduate students to analyze data for $1,000.00

Teachers know and trust the consultant.

Graduate students will be qualified testers and will not interfere with classroom activities.

With the extra $1,000.00, the director can hire a consultant to help decide how best to design and distribute data.

CHOICE: The director hires the consultant and graduate students for $1,000.00 and closely supervises their activities.

EVALUATION: The director checks to see if the following events occur as planned:

Evaluation plan created by September 1

Collecting data begun by September 15

Data collected by April 30

Report sent in to B.E.H. by June 30

Two-page data sheets ready for dissemination by June 30

The director seeks information from B.E.H. about the quality of the report to them.

The director hires an independent consultant from next year's budget to study the impact of public dissemination of data.

FEEDBACK: A budget of $2,000.00 for evaluation is probably too small.

The director needs to find out how other project directors are handling this problem.

The director needs to hire a person for next year who could serve as an administrative assistant and as the director of evaluation for the project.

In general, then, the model describes a series of structures, indicates that those dimensions are inter-related, and allows the planner to "fill-in-the-blanks" with information that fits his needs. The model is conceived of as one way a project director or planner might begin to conceptualize what has to be defined and accomplished. It is not intended to be an ideal of how one plans nor as an example of a theoretical hierarchy of planning. In fact, starting to plan is probably a very random process, and the model may present planning elements in an *artificial* order.

WHAT ELEMENTS OF THE MODEL ARE MOST ESSENTIAL TO THE PLANNING AND THE SUBSEQUENT EVALUATION PROCESS?

In order to use the planning and evaluation model, one should define the terms it contains. Definitions of each are provided in the Glossary of Terms (Appendix A), but special emphasis needs to be placed on defining *goals, objectives,* and *evaluation.*

Goal statements reveal the project's long-range intentions, for example, what is assumed will happen to its target population as a result of a certain programmed treatment? Specifically, one goal of a project which serves two-year-old retarded children may be to improve their overall cognitive development so that they are able to attend normal classrooms during public school years. Obviously, this statement is filled with many assumptions and value judgements, but it gives the direction or purpose of the project's programs. However, this type statement does not lend itself to evaluation of treatment effectiveness.

To gain some idea of effectiveness, one must state more specific intentions which include measureable indices and time limits. This can be accomplished by stating *objectives* which describe what will be done by the project during its operations and which are related to a specified goal. The assumption is then made that if a positive evaluation of the specific objective results, then the project is in the process of meeting its goal.

Objectives described in this monograph are not the type generally used for daily operations but they are, somewhat like goals, statements which encompass a broad time-frame from four months to one year. Since delineating tasks and reporting data are the major reasons for having these objectives, they are divided along functional lines which have been labeled administrative and outcome objectives.

Administrative objectives reveal the management strategy used by the project. They indicate what has been done or will be done in project operations. For example, during the months of January, February and March a project might establish a weekly parent discussion group, hire an early childhood consultant, and operate three classes for physically handicapped children.

Outcome objectives reveal expected changes in behavior or attitude such as children's gross motor abilities and expressive language. The effectiveness of these objectives must be described in evaluative, or data-based terms.

With parents as targets, Chart 1 (page 7) presents an example of a goal, an outcome objective, and an administrative objective with sample evaluation results. Since outcome objectives tend to be the most difficult to develop, Appendix B offers some additional examples. In it, outcome objectives are parallelled with goals, treatment strategies, and evaluation methods.

Finally, the project director will need to make a somewhat arbitrary decision about how many objectives are needed to describe procedures and how much data should be collected in the evaluation of those objectives. Administrative type objectives are relatively easy to specify and evaluate; thus, the number does not seem overly important. However, it is recommended that a project focus on one or two goals with only two or three outcome objectives associated with each. The reason for this is that the process of collecting, analyzing and describing data results can become overwhelming. Unless specially funded for data-processing, the project probably will not want to allocate an extensive amount of its total resources and time to this problem.

Appendix C offers additional material which offers several other examples of the distinction made between goals and objectives. Also included

are some sample structures which might be useful when writing goals, administrative objectives and outcome objectives.

FOR WHAT TARGET POPULATIONS SHOULD PROJECTS PLAN PROGRAMS?

Although the First Chance Network serves a heterogeneous population of preschool, handicapped children and their parents, the projects have in common three major target audiences for which they need to develop programs: children, parents, and decision-makers.

Delivery of services to children and to their parents are usually the first problems considered by a project. Having developed programs in these two areas, the project begins to select those in decision-making positions to aid in the further development and replication of programs for preschool handicapped children. Chart 2 (page 9) shows the relationship of these target groups to goals and objectives. Chart 3 (page 11) is an example of how this matrix might look when completed.

WHY IS A PRECISE STATEMENT OF A PROJECT'S PLANS IMPORTANT?

There are many reasons why specifying plans is useful, but three seem to stand out. They are:

GUIDELINES. Presumably, well-stated plans should be an asset to a project's staff. Knowing the purpose and direction of an organization should reduce anxiety and facilitate decision-making and this is congruent with the goals of the project.

INFORMATION. Well-stated plans can be used to communicate to others what results a project expects from its activities. Targets for receiving such information might include the funding agency, decision-makers for replication or parents whose children participate in the project's program.

EVALUATION. Planning is the core of the concept of evaluation presented in this monograph. The belief is that evaluation should be related to statements of intent. Chapter II presents this idea in a detailed analysis.

CHART 1

EXAMPLE OF THE RELATIONSHIP OF GOALS, OBJECTIVES AND EVALUATION

STATEMENT	EXAMPLE	EVALUATION RESULTS
*GOAL	The project's parent program will increase the parent's knowledge, understanding, care and training of their exceptional child so that the child is able to enroll in a normal classroom by age seven	Unknown at this time
*OUTCOME OBJECTIVE	To increase by 40% over baseline the positive attitude of the parents regarding the acceptance of the child's handicapping conditions by the end of his first year in the program	As a group, parents' positive attitudes toward the acceptance of the child's condition improved by 50% as measured by a center-made criterion referenced tests used in a pre-post manner. When asked directly by staff at the end of the year if they felt they were better able to cope with the child, and associated problems, 95% of the parents said they were
*ADMINISTRATIVE OBJECTIVE TO CARRY OUT STRATEGY	To have at least one parent from each family attend 75% of the weekly meetings during the school year in which the major topic of discussion will be problems dealing with children	Records kept by staff indicated that one parent of 95% of the families attended 82% of all meetings. A content analysis of the anecdotal records of the meetings indicated that problems with children was the topic of discussion in 90% of the meetings

*Note: Other objectives related to goal are needed in actual program practices.

CHART 2

PROGRAM AREAS FOR FIRST CHANCE PROJECT

PLANNING OBJECTIVES MATRIX	CHILDREN	PARENTS	DECISION MAKERS
GOALS			
ADMINISTRATIVE OBJECTIVES			
OUTCOME OBJECTIVES			

CHART 3

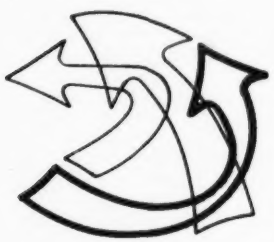
EXAMPLE OF COMPLETED MATRIX

	CHILDREN	PARENTS	DECISION MAKERS
GOALS	By June 1, 1976, the project will increase the developmental level of non-language exceptional children in five areas: personal-social skills, gross motor skills, fine motor skills, cognitive skills and language skills so that the children avoid institutionalization.	By June 1, 1976, the project's parent program will increase the parent's knowledge, understanding, care, and teaching of their exceptional children so that they can effectively deal with the child in the home	The project will solicit replication of its programs through consultations with prospective replicators, and through seminars, letters, dissemination and demonstration activities during the life of the project
ADMINISTRATIVE OBJECTIVES	To identify, assess and include by November 1, 1972, those children in the child-training program who meet the criteria of age—from birth to five years—and exceptionality To develop by September 1, 1972, sets of lesson plans to be included in training manuals for the training of exceptional children	To select by November 1, 1973, families for participation in a language clinic To develop by November 1, 1973, sets of lesson plans to be included in training manuals for the training of parents in the teaching of their exceptional child	To plan by June 1, 1973, methods of making the project visible to the general public and professional community To plan by June 1, 1973, the composition, intended viewing audience, distribution, objectives and purposes of all project materials to be distributed, such as: brochures, television tapes, and slides
OUTCOME OBJECTIVES	To increase by June 1, 1973, the receptive and expressive language of all project children by a significant amount as measured by the ITPA, and center-prepared, criterion reference test	To increase by June 1, 1973, parents' knowledge of child rearing practices so that 95% of parents are able to respond to teacher-made tests on child rearing with 80% accuracy	To increase the community support of preschool education by disseminating information on the project's philosophy, success with young children and its potential worth to the total community

CHAPTER II

. . . process evaluation provides information for daily decision-makers; product evaluation is a summary of information taken over a longer time frame such as one month, six months, or one year.

. . . objectives could be divided into two types—administrative and outcome. . . . . . division is partially based upon the degrees of difficulty in evaluation.



EVALUATION

WHAT IS EVALUATION?

Evaluation can be defined as a technique which provides a decision-maker with information about the merit of plans, the processes being utilized, or, a product that has resulted from activities. The evaluation of plans provides information about the worth and value of goals, objectives, and strategies. This process is referred to as input evaluation and is accomplished by expert review of plans and resources. The details of input evaluation are not discussed in this work because the focus of this monograph is on evaluating the effectiveness of operations. Techniques for collecting information on project effectiveness are hereafter called process or product evaluation. Evaluation techniques are, in this model, always related to objectives.

Process Evaluation occurs when one monitors the daily operations of a project. It is used to assess whether activities, strategies, and treatments are working on a daily basis as planned. The concept is relatively simple but it can be time-consuming, since frequent collection of data is required. Chart 4 (page 14) provides an example of how to perform process evaluation.

There are many kinds of indices one could utilize when collecting data for each objective being subjected to process evaluation. The objective in Chart 4, for example, relates to increasing a child's ability to feed himself. Information about this objective could be collected in a variety of environments—the home, the classroom, on field-trips. Obviously, this data provides feedback as to how well the child is doing. The data could be summarized to report how well the project is doing in meeting this objective for all children and, in this way, provide information for another area—product evaluation.

Whereas process evaluation provides information for daily decision-makers, *product evaluation* is a summary of information taken over a longer time frame such as one month, six months, or one year. Product evaluation reveals information about what the target population was like when a program started, and what the population is like after treatment. Whereas process evaluation focuses on the effects of treatment on

individuals for brief periods of time, product evaluation is used to produce data about changes in groups of people over periods as long as one year.

Chart 5 (page 15) illustrates that information gathered for process evaluation (in this case the anecdotal record) can be summarized for product evaluation results.

CHART 4

SAMPLE OF PROCESS EVALUATION

OBJECTIVE	TASK	MONITOR	SAMPLE DATA
To increase each child's self-help skills so that by June 1, he can feed himself without the aid of others.	Child able to feed self.	Anecdotal record for one child.	Oct. 1 – Child can feed self finger food. Oct. 4 – Child interested in holding spoon, but not able. Oct. 10 – Child holds spoon poorly, drops often.

Chart 6 (page 16) presents an overview of potential product evaluation techniques that one might use to obtain data on the outcomes of extended treatments. Techniques are classified according to type of measurement device (standardized or non-standardized) and by target group (children, parents, or decision-makers). Note that most of these techniques could be used in process evaluation. For example, attendance reports and records of contacts can be used to indicate how treatment of programs are progressing. A summary of this information demonstrates achievement of the related objectives.

CHART 5

SAMPLE OF PRODUCT EVALUATION

OUTCOME OBJECTIVE	TASK	MONITOR	SAMPLE DATA
To increase all children's self-help skills so that by June. 1 they feed selves without the aid of others.	Children able to feed themselves unaided.	Pre-post observation of criterion behavior. Anecdotal record.	On November 1, only 10% of the children could eat unaided (N=25). By June 1, 96% of the children were eating without the aid of others.

CHART 6

TECHNIQUES FOR PRODUCT EVALUATION

MEASURES	CHILDREN	PARENTS	DECISION MAKERS
STANDARDIZED	Standardized tests administered to child Standardized informant-interview scales Established observation and behavior analysis schemes	Standardized "paper-and-pencil" measures administered to parents Established observation and behavior analysis schemes for parent-child interaction	
NON STANDARDIZED	Attendance at program Number of children sent on to regular classrooms Parent report-checklist, rating scales, letters Teacher report, checklist, rating progress report scales Anecdotal records, compiled Case studies by clinician	Attendance at parent meetings Record of contacts with center: Phone calls Appointments Conversations Visits to classroom Interview of non-standardized paper and pencil tests on: Attitude Knowledge Report of child-rearing practices Opinion of parent child program	Recording number of: Requests of center for consultation Referrals of children by other agencies Observations and visits to school Brochure circulation Speaking engagements by staff Reports in newspaper articles, T.V. stories, magazine pieces, articles in journals Contacts with other agencies Presentations to groups

CHART 6 (con't.)

MEASURES	CHILDREN	PARENTS	DECISION MAKERS
NON STANDARDIZED (con't.)	Records of criterion behavior Informant interview scales Criterion test administered to child Observation and behavior analysis schemes, applied to behavior observed on video tape Letters on testimonials from those who know dhild	Teacher report of parent behavior: Anecdotal records Checklist Descriptive narrative Observation and analysis of parent-child interaction Letters and comments from parents	Questioning parents on how they learned of program Follow-ups of workshops and demonstration activities for feelings about presentation Record of new facilities, modeled after yours Noting changes in budgeting that increase funds to handicapped Straw polls of agencies and city about knowledge of project

IS EVALUATION THE SAME FOR ALL ADMINISTRATIVE AND OUTCOME OBJECTIVES?

The previous chapter indicated that objectives could be divided into two types—administrative and outcome (see Figure 2). This division is partially based upon the degree of difficulty in evaluation. The achievement of administrative objectives is less difficult to assess since they are related to management. On the other hand, evaluation of outcome objectives focuses on changes in the behavior of a target group. Thus, measurement of a more sophisticated nature is needed.

Most administrative objectives require very specific actions and results, such as, to select 25 children for program, hire two early childhood specialists, develop a language curriculum. Whether or not these objectives are met can generally be reported in a "yes" or "no" fashion or illustrated with the description of some artifact, such as manual for the teaching of language. The procedures necessary for collecting data for this evaluation can generally be satisfied by record-keeping and counting (see Chart 7, page 19).

FIGURE 2

RELATIONSHIP OF OBJECTIVES TO STRATEGIES AND EVALUATION

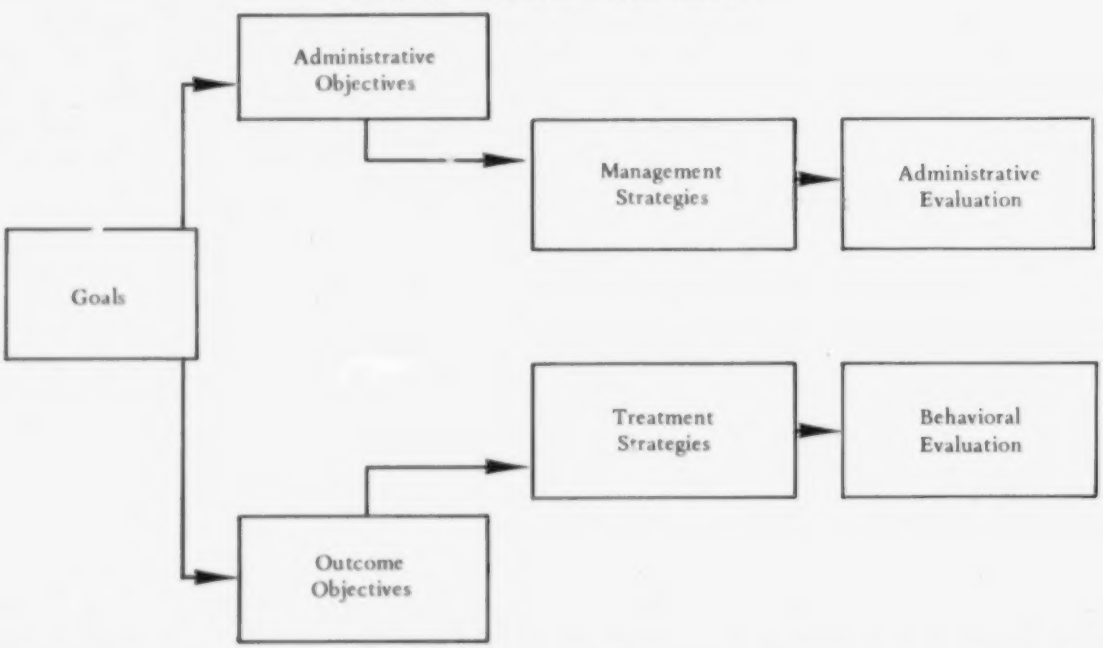


CHART 7

EVALUATION OF ADMINISTRATIVE OBJECTIVES

OBJECTIVE	POSSIBLE MONITOR	SAMPLE DATA
To have one parent from each family spend 1/2 day per week observing teachers at center	Attendance record	WEEKS 10/8 10/15 10/22 Smith x x Jones x x x
To make 10 other agencies aware of the services we offer and to have 5 of them make referrals by 6/1/72	Records of referral	Agency — 1st Referral — Total Social — 6/1/72 — 5 Dept. of Ed. — 1/20/72 — 1 Mental Health — 2/1/72 — 11

The evaluation of outcome objectives is much more complex since it deals with human behavior. Such objectives as to increase the expressive language of language-impaired children by a significant amount by June 1, or decrease by 50% the inappropriate behaviors of emotionally disturbed children by May 1, might require educational testing or observational analysis. Because these objectives are difficult to assess, the use of several informal measures as a supplement to standardized measurements is recommended. Chart 8 (page 20) demonstrates the clustering of two measures to reveal information about one objective.

WHO SHOULD CONDUCT THE EVALUATION?

At present, there are several sources a project might use for evaluation. Some projects have a staff evaluator who is responsible for all data collection and reporting. A few projects have used outside consulting firms whose personnel design the data and prepare the report. Finally, others have combined the skills of their own personnel with those of an outside evaluation consultant or group. Any of these sources can produce good results and each project will have to decide which method best meets its needs.

As for the kinds of data collection and suggestions for reporting procedures, Chapter III will deal with these subjects in greater detail.

CHART 8

EXAMPLE OF EVALUATION OF OUTCOME OBJECTIVE

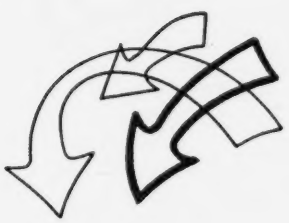
TARGET	OBJECTIVE	TECHNIQUE–PRE-POST	SAMPLE DATA
Emotionally disturbed children	To decrease inappropriate behaviors of all children in the project so that they are able to function emotionally and socially in group activities	*Observational Analysis* Teacher's aide charts behaviors for 3-day period, 1 hour per day in group setting in October, January, March. A minus one score is given for each inappropriate behavior. *Ancedotal records* Ancedotal records are kept on each child for the year. The records of the week and one weekly chart are given to three outside observers for a blind comparison of which is behavior more appropriate.	At the start of the year each child was observed in group activity so that a baseline score for disruptive behavior could be obtained. Disruptive behavior was defined as behavior which required the attention and correction of the teacher. The initial group score was -95. By January this score was -35 and in March, -5. Ancedotal records indicate that all but 2 of 25 children are now considered to be functioning well in group activities as compared with 15 to 25 in October.

CHAPTER III

. . . data from a network of projects aid the funding agency in its advocacy for the projects and their programs.

. . . number of levels at which request for data can be made evinces why demands for conflicting data are sometimes made.

. . . objectives are evaluated to provide internal information on the results of treatment; however, this information is also used to satisfy the demands of outside audiences for data on the results of the project's work with a target population.



DATA COLLECTION

WHY ARE REQUESTS FOR DATA AND INFORMATION MADE?

Projects in the First Chance Network need to collect at least two kinds of data—one to meet their own internal evaluation and decision-making needs and the other to meet requests by external agencies, such as the Office of Education.

The most obvious reason a funding agency requests data from local projects is that demands are made on the agency for information about how monies are being spent and what services are being rendered. Generally, the Office of Management and Budget, the federal fiscal "watchdog", is the initiator of demands for data, but others that frequently request information might include the Congress, the White House, or the Program Planning Branch of the Bureau of Education for the Handicapped. Second, data from a network of projects can help the agency decide how to allocate future funds to help programs meet their objectives, and how to best use its own personnel. Finally, data from a network of projects *aid the funding agency in its advocacy for the projects and their programs.* When the time comes for a policy decision on budgetary matters, good data could greatly influence the allocation of resources to the entire network.

WHY DO DATA DEMANDS VARY SO MUCH IN TYPE AND REQUIRED ACTIVITIES?

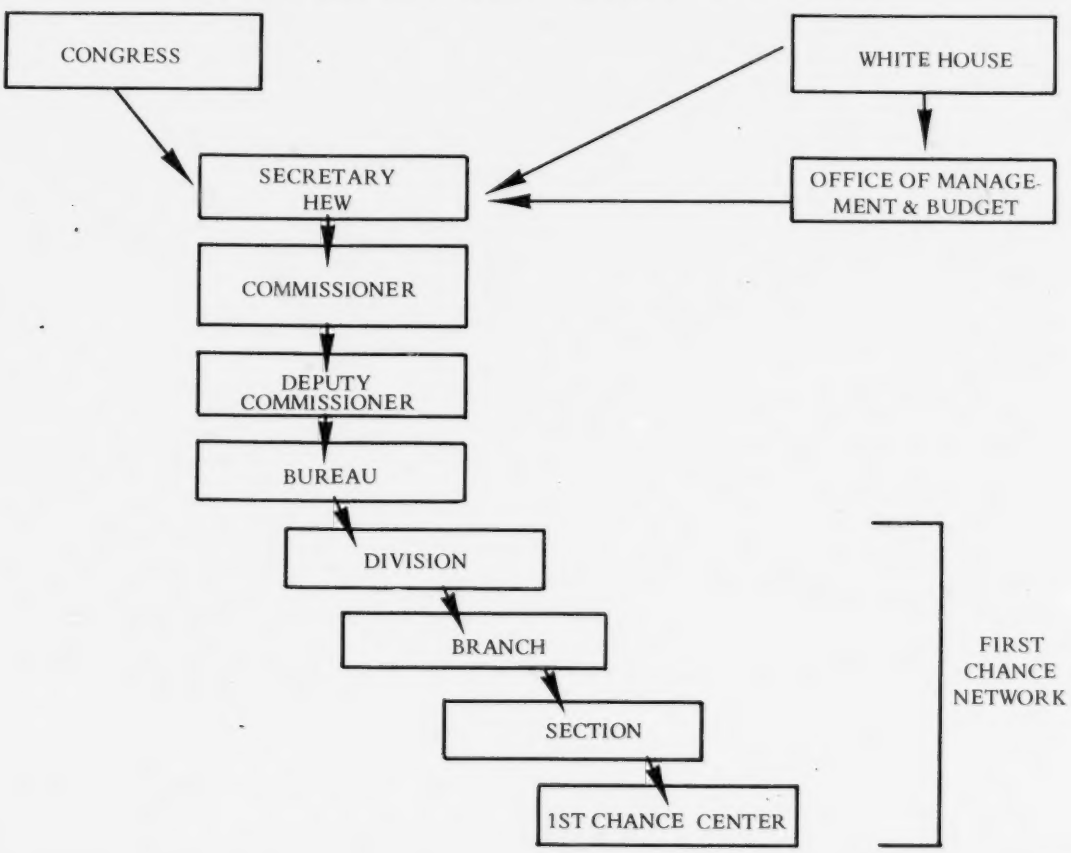
Data requests from a parent agency to a local project may seem to be extremely inconsistent. For example, a project director may be asked if he needs help in establishing program components, and at the same time he may be told to prove he is having success in working with children. The problem is one of having to provide data to the funding agency about areas of potential weakness while at the same time having to demonstrate success in the same areas. The director is in a dilemma about how much "weakness" data to

reveal and how to emphasize the "strength" data. Usually, the two kinds of data are not solicited by the same source but represent questions and demands from different sources within the same governmental structure.

The variety of offices that can influence inquiries for data in the First Chance Network is shown in Figure 3. The number of levels at which requests for data can be made evinces why demands for conflicting data are sometimes made.

Examples of evaluation questions and data in which decision-makers at various levels might have

FIGURE 3
OFFICES THAT CAN INFLUENCE INQUIRIES FOR DATA



an interest appear in Chart 9 on page 27. Sample procedures for collecting data are also provided.

WHAT ARE THE MAJOR TYPES OF DATA TO COLLECT FOR EVALUATION?

There are three basic types of data which a project could pass on to its funding agency or other sources it wishes to influence–*input, process, and product.*

Input data describes the resources available in the operation of a project, like salary of teachers, number of personnel, number of students. This kind of data is relatively easy to collect and analyze. Generally, this data will be requested from projects on a yearly basis and will be used for summative information about the network, not for the evaluation of the success of the project.

Process data provides information on the actual daily operation, treatments, and strategies of programs. The collection of this kind of information requires the specification of what is expected to occur daily and a method of checking to see if it did. While useful for decision-making within the project, this type of data in raw form, (daily attendance records of parents in classroom) may have little meaning for anyone other than those closely associated with the project. But summative information (total number of parents attending class for year in class) from process evaluation may be useful as product data.

Product data describes how effective the project was in meeting its operational objectives. For example, if one of the objectives of the project was to have 75% of all children feeding selves by June 1, 1972, and on June 1 they found that 80% of them could; then, they can report that the objective has been achieved. Projects developing this type data will probably find it useful in "selling" their programs to the funding agency and other interested parties.

While all three types should be collected, process and product data, can be especially useful in meeting varying requests for data by the funding agency.

HOW MIGHT ONE REPORT INFORMATION TO B.E.H. OR OTHER INTERESTED AUDIENCES?

The answer to this question has been the latent subject of the first three chapters. In Chapters I and II a system which related planning to evaluation was discussed. Planning was presented as a process of decision-making resulting in the organized statements of the goals and objectives of a project. One purpose of evaluation is to provide information to a decision-maker about processes and products. So that ultimately, this information can be used again in the planning cycle.

The procedures described became the bases for reporting information to other audiences. Figure 4 is a visual display of how this might work. Outcome objectives are evaluated to provide internal information on the results of treatments; however, this information is also used to satisfy the demands of outside audiences for data on the results of the project's work with a target population. At present, this information is required by B.E.H. once a year. Administrative objectives are evaluated to provide internal and external information on how well the project was able to meet in management goals and objectives. In the past, B.E.H. has requested this information on a quarterly basis but future plans call for it to be collected less often.

The next and final chapter addresses itself to some of the current trends and potential problems in educational planning and evaluation. Overall, this closing portion of the monograph is more general in nature than the first three chapters.

FIGURE 4
OVERVIEW OF USE OF GOALS, OBJECTIVES, AND EVALUATION

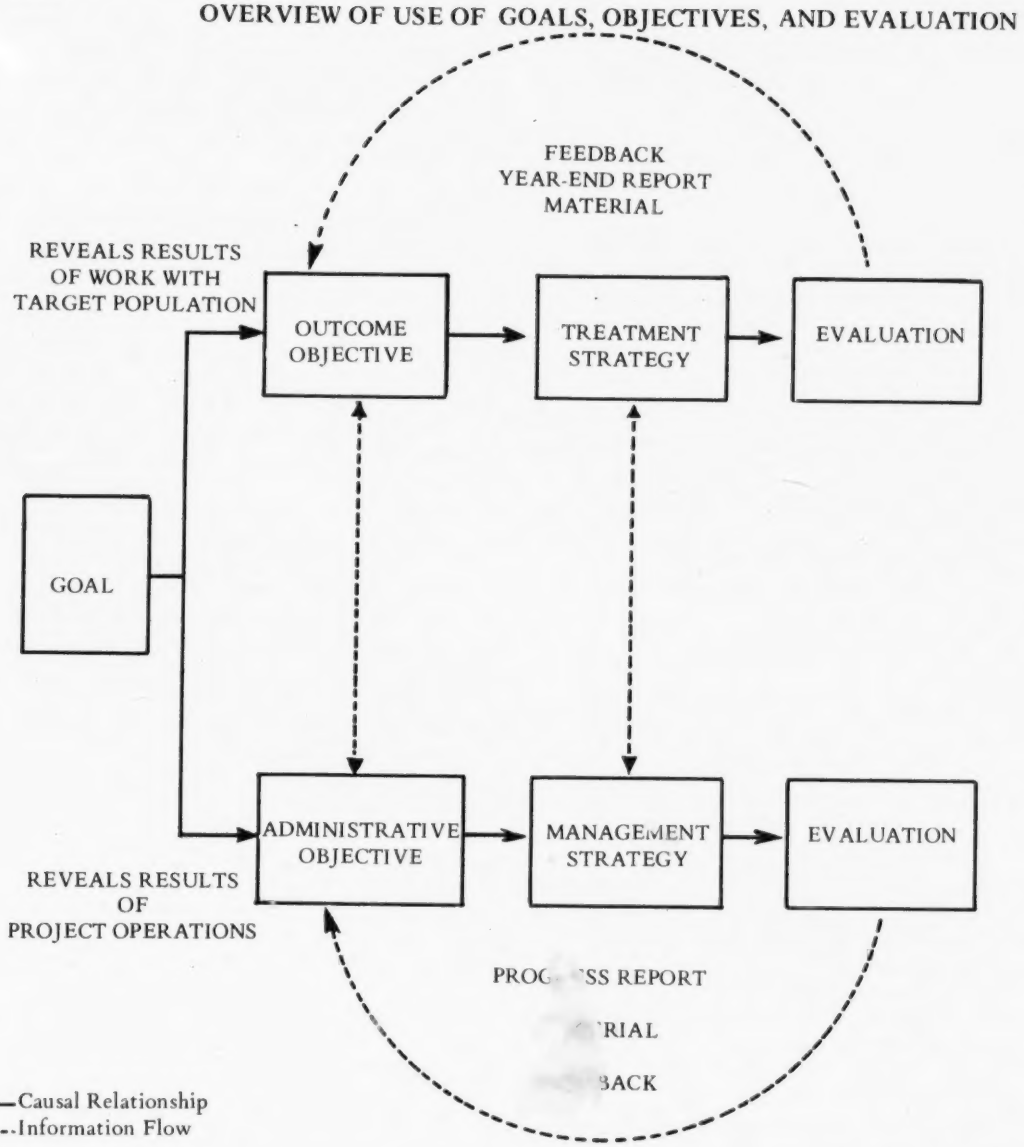


CHART 9

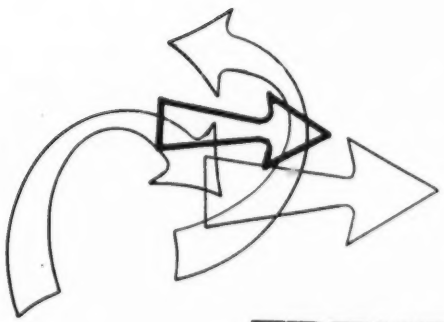
DECISION MAKERS' AND EVALUATION QUESTIONS

DECISION MAKER	QUESTIONS	DATA NEEDED	PROCEDURES FOR DATA COLLECTION
AGENCY HEAD – POLICY LEVEL (such as the Director of B.E.H.)	Which are most important goals? Which programs can meet the goals most effectively? Which of my programs can be defended effectively?	Establishment of priorities by political and peer consensus The relative costs of potential program alternatives Evidence that programs are meeting objectives	National Advisory Groups and Consultants meet & provide consensus Cost effectiveness analysis Data from programs relative to success. Case histories and statistics needed
PROGRAM HEAD – NETWORK LEVEL (Director of 1st Chance Model Centers)	Which of the individual sites are of high quality? Which elements need to be changed to strengthen program? (Staffing, operations, consultation)	Data related to criteria of high performance expectations Data on consistent strengths and weaknesses across program units	Site visits and panel reviews Reports from staff visits, progress reports, renewal applications
PROGRAM DIRECTOR – FIELD PROGRAM (Director of a 1st Chance Project)	Are my goals worthwhile and feasible? How can I operate my program more effectively? Am I really having impact on the problem I am attacking?	Local Advisory Groups support of goals Management analysis of cost vs. performance Data on change or on criterion performance by children or ultimate target of program	Continued consultation and advice from citizens and professional peers Evaluation of effectiveness of management objectives–pert charts, time lines, etc. Evaluation plan for impact and change for major program targets

CHAPTER IV

. . . we believe that the emphasis on planning and evaluation comes from a very different source than other educational trends and it is quite likely to be around for a long time.

. . . the unique demands of today and the future require that we forge a system that can relate effectively to continuous new developments while preserving the best of what we now have. Implicit in such a system is the need for systematic planning.



TRENDS

We might conclude by reflecting on how and why the great emphasis on planning and evaluation has come about in American education. Certainly, the "ebb and flow" of ideas and educational fads are not new to the American educational scene. Not too long ago, we had great stress on team teaching and teaching machines as a way out of our educational wilderness. We now are in the midst of concerns for open education and open classrooms with a predictable future decline of interest in that particular approach. It is tempting to think of "planning and evaluation" as just another one of these educational fads. Many educational administrators have determined that if they can just "grit their teeth and hang on", the wave of interest in evaluation will pass by and they will not have had to respond specifically to it. But we believe that the emphasis on planning and evaluation comes from a very different source than other educational fads and it is quite likely to be around for a long time.

In the 1960's, we were going to use the educational system to remedy the social imbalance for those citizens who had not had fair or equal educational opportunities. Programs like Head Start and Title I of the Elementary and Secondary Education Act were designed to bring about a balance, and many other educational initiatives had similar objectives. But these programs have not reached the high, if not impossible, goals set by their enthusiastic supporters. It should be clear by now that an educational system, by itself, will not eliminate poverty.

For example, the Coleman Report (Coleman, et al., 1966) has probably had more influence on decision-makers than any preceeding piece of research. This is not because it is more sophisticated or more excellent than other studies, because it is not. But, the results were interpreted to mean that schools do not make that much difference in the development of the child; more important than education is the social milieu in which the child operates. A recent publication by Jenks (1972) continues that concept and suggests that education, in fact, has little impact on the development of children and that many other factors are of much greater importance.

DOUBTS ABOUT EDUCATION'S ABILITY TO IMPROVE

There can no longer be much doubt that in America many groups have grown increasingly skeptical about the values of public education. The sharp increase in school bond rejections, the lack of solid political support for major educational funds, and the new cry for accountability are all symptoms of an important estrangement.

What does the recent wave of popularity for such terms as *accountability, performance contracting,* and *educational vouchers* really mean? Demands for accountability represent a suspicion that the schools are not doing a good job and supposedly, accountability reports will provide the public with the evidence to support that suspicion.

The public seems tired of all the input descriptions—the number of teachers, the curriculum programs, or the new plan—and now wants some output figures. In other words, what happens as a result of all of this input? The interest in performance-contracting represents a strong public willingness to let somebody else take a crack at the problems with which the schools seem to be unable, or unwilling, to deal. Likewise, there is considerable interest in the concept of educational vouchers which gives the consumer some control over how he spends his educational dollar and represents the feeling that a "carrot and stick" approach is needed to force change, since the schools will not reform themselves.

We can all agree that the American educational enterprise, like other large and complex entities, does not reform itself too easily. With evidence all around us of our inability to provide good education for the disadvantaged, we don't seem to be making or even discussing any great changes or modifications.

In special education there is increasing evidence of this lack of progress in a number of fields. For example, the lack of positive gains in the special class programs for educable mentally retarded, the limited educational output from either the oral or manual approach for the deaf, and the spontaneous remission of troubled children without treatment, have not caused a major reorganization of services. Is this because of stupidity, weakness, or self-interest? What is keeping us from more intelligent programming?

We have a characteristically human way of dealing with such failures—the decapitation of the "guilty". We fire superintendents and chancellors; we elect different public officials in a vain attempt to purge ourselves of the evil and incompetent; and we seek the charismatic leaders. For the sake of simplicity we hope that evil men are the root of the problem, but history tells us that this really isn't so. We suggest instead an alternative hypothesis to explain the slowness of the educational establishment to act: *We fail to solve educational and social problems because we are not organized as a society to solve those problems.*

THE EDUCATIONAL NON-SYSTEM

The "American Educational System" as a concept is both a misnomer and an oversimplification. First, we don't have a true system in the usual sense of that word. A *system* is a combination of elements functioning in a relationship to one another. Instead of this, we have an educational tradition that stresses autonomous units and self-contained operations rather than interactive mutually responsive elements. There is both strength and worth in the American educational tradition of diversity, but the unique demands of today and the future require that we forge a system that can relate effectively to continuous new developments, while preserving the best of what we now have. Implicit in such a system is the need

for systematic planning.

One of the advantages of the planning and evaluation model presented in this monograph is that it allows us to face up to alternative strategies. These strategies may be hidden from us as long as we deal only with our own single program. A graphic example of the complexities of strategy selection in program planning is provided by the following discussion of the man-power training needs for emotionally disturbed children.

If we use a conservative incidence figure of two percent in the area of emotional disturbance, we find that there are approximately 1.2 million disturbed children (ages 5-19) in need of special services in the United States. If our strategy called for the provision of full, special education services to all children, we could determine how many professionals would be needed by establishing the accepted staff-child ratio. Therefore, we would need 150,000 specialists. But let us continue in our conservative mode and say that we will settle for giving special service to only sixty percent of the emotionally disturbed children by 1975. That means we will need only 90,000 specialists, instead of 150,000. Right now we have only about 11,000. So we need about 79,000 more specialists (see Chart 10, page 32).

At this time, we can begin discussing money. Many people think that if the federal government would only give more money for training, maybe the problem would be taken care of. But is money the problem? If we use estimates that for every federal fellow there are 2 specialists graduating from master's programs without support and 4 in undergraduate programs, we can estimate that a total of 500 specialists per year are being graduated. Using 1970 as a base, we will need 158 years to meet the demand for personnel to provide service to sixty percent of the emotionally disturbed, or by the year 2128 we will be providing special services to sixty percent of those children in this area who need them.

However, these figures don't reflect the yearly manpower attrition rates. We can expect to lose about eight percent of the work force in any year through death, retirement, and pregnancies, which is about 900 persons. Since we are only graduating 500 a year, we aren't even keeping up with the attrition rate. Doubling the program output at the federal level would only allow us to break even. It is obvious that we can't begin to meet the need for professional services in the future.

Through this example one can see that education, like any other enterprise, needs facts to guide its actions, creative ideas to help it improve performance, and careful planning to assure that needed resources arrive at the right place at the right time. Traditionally the political realities of resource acquisition have not allowed realistic, systematic planning since the approach to systematic planning contrasts significantly with the way programs are supported now. Figure 5 shows two curves in the growth and application of resources on a particular hypothetical problem. The solid line shows the typical expenditure of resources curve that comes from systematic planning. The first year or two is usually spent in the analysis of the problem area, the gathering of resources, the preparation for a major effort. Once this groundwork is laid, much greater resources during years three and four can be applied to the problem area, so that by the time the final resources are needed, a rather careful and systematic program growth curve is produced.

In stark contrast to that curve in Figure 5 is the dotted line which shows a more typical funding pattern that comes through the political process, whether at the state or federal level, regardless of which political party is in power. The standard political philosophy for the funding of new programs is "strike while the iron is hot", or

CHART 10

SPECIAL EDUCATION MANPOWER NEEDS–ESTIMATION

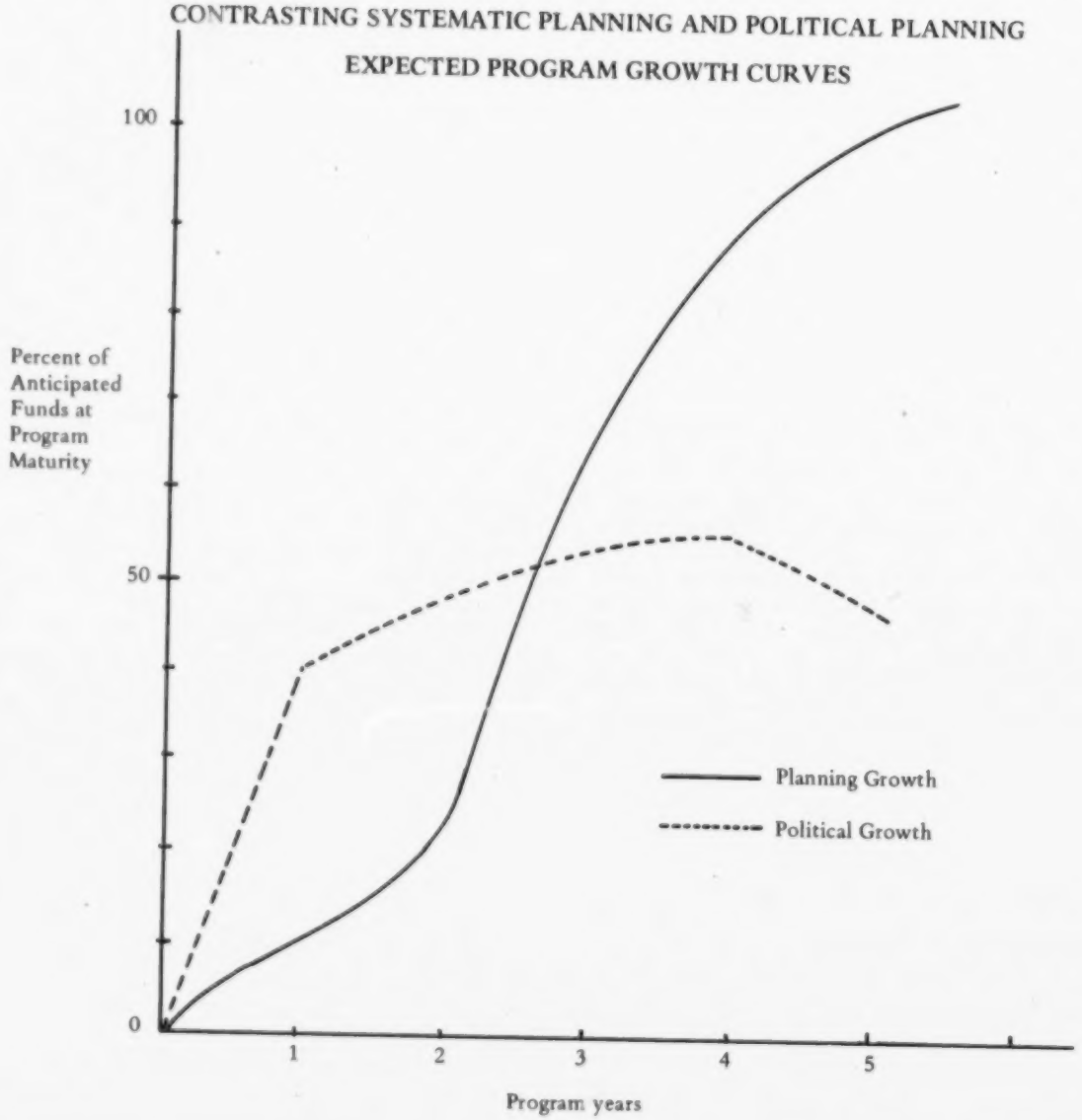
NEEDED INFORMATION		NATIONAL CURRENT MODEL EMOTIONALLY DISTURBED		NATIONAL CURRENT MODEL LEARNING DISABILITIES	
Children needing services (ages 5-19)		2%	1,200,000	1%	600,000
Children now receiving special services			90,000		120,000
Trained professionals available			11,000		9,000
Professionals needed to meet 60 percent of need			79,000 (8:1 ratio)		14,000 (20:1 ratio)
Existing training institutions		About 40		About 30	
Current output of training institutions		About 500		About 400	
Maximum capacity of training institutions		About 1000		About 8000	
Years to criterion–maximum capacity (60 percent goal)		79 years Year–2049		33 years Year–2003	
Years to criterion (8 percent attrition)	Current support	Never		Never	
	Maximum support	Over 800 years		Over 200 years	

Taken from Gallagher (1972).

FIGURE 5

CONTRASTING SYSTEMATIC PLANNING AND POLITICAL PLANNING

EXPECTED PROGRAM GROWTH CURVES



try to get all the resources that you can for your program while you can in the fear that the public or the legislature or both will lose interest in your particular area and will move on to other issues. Unless you get major resources while you have the attention and interest of the public and the legislature, you will be unlikely to get them later on. Therefore, even though wise legislators know that it is difficult to spend large sums of money wisely at the beginning of a program; they will nevertheless ask for large sums on the grounds that, while the funds for the program may not be increased beyond the initial level, they will not likely be decreased. Large grants are asked for so that when planning and experience finally catch up with the resources, there will be enough resources there to deal with the problem. This is a very wasteful and discouraging approach to the problem, because it encourages inadequate performance and failure. We must find some more sensible approach to resource allocation if the cycle of enthusiasm, disappointment, and rejection does not follow its predictable course in one program after another.

The Handicapped Children's Early Education Program was more fortunate than most in the sense that it had a short early growth period and the chance to work out many of its problems before it became a large and major demonstration network. Those who are familiar with the projects and the programs involved in the centers can probably predict the large number of additional problems that would have occured if enough money had been available in the first years to fund one hundred centers instead of twenty.

PROBLEMS WITH PLANNING

In the final analysis, the great enthusiasm, in some quarters, for systematic planning should not hide from us a number of weaknesses and problems.

First of all, there is a tendency to display goals, objectives, and strategies—the paraphernalia of planning—without drawing a tight relationship between such statements and actual budget allocations. It is generally accepted that stating objectives and strategies in the absence of budget allocations is not a plan but a dream.

Another common error involving planning is the belief that the establishment of a three- or five-year plan is a prediction of what will occur. We are *not* really attempting to predict the future with long-range planning. Instead, planning allows us to see what we will need, *if* you carry your objectives through to the end result. It is no surprise that the vast majority of five-year plans never come into being. They serve their purpose by allowing the individual who has done the planning to have more insight into the wide variety of resources needed and the necessary sequence to bring these resources to bear on the objectives.

One other problem is the possibility of setting the plan decided upon in psychological concrete in the minds of those who decide upon it and those expected to carry it out. The ability to develop a plan that can change with changing circumstances and in the face of new data is perhaps the prime challenge of the planners of today. There is no reason to believe that it cannot be done, but the effort, the commitment, and energy that goes with the first plan seems to make it difficult to change even when such change is clearly called for.

Finally, we often focus on evaluation by looking only at the results with the primary objectives. Secondary results are hardly ever studied or analyzed. For example, in evaluating an early childhood program for handicapped children, the most common efforts to evaluate focus on changes in the developmental patterns of the children.

Changes in the parents, or in the neighborhood or community are rarely, if ever, pursued.

Similarly, a secondary or tertiary effect such as the development of leadership people, through the stimulation of special programs such as the Early Childhood program or Title III, ESEA, rarely becomes a part of the total evaluation. We run the risk of drastically underestimating the program effects, because in many cases the second and third order effects are more important than the primary objectives themselves. Such observers as Scriven (1967) have been so impressed by this problem that they have suggested that evaluation should be done without paying attention to the stated objectives of the program at all so as to avoid "tunnel" vision, or seeing only those dimensions that the original program focused on.

Needless to say, these lists of problems suggest that by becoming interested in planning, we have exchanged one set of difficulties for another. The most we can hope for is that these difficulties will be not as severe as we faced whenever we handled our programs haphazardly.

BIBLIOGRAPHY

Coleman, J.S., et al. *Equality of educational opportunity.* Washington, D.C.: Government Printing Office, 1966.

Gallagher, J.J., *The search for the educational system that doesn't exist.* Washington, D.C.: Council for Exceptional Children, 1972.

Jenks, C., et al. *Inequality: A reassessment of the effect of family and schooling in America.* New York: Basic Books, 1972.

Paulson, C., *A strategy for evaluation design.* Eugene, Oregon: Teaching Research, 1970.

Provus, M., Evaluation of ongoing programs in the public school system. In *Educational evaluation: New Roles, new means,* Ralph W. Tyler, (ed.). The 68th Yearbook of the National Society for the Study of Education, Part II. Chicago, Ill.: University of Chicago Press. p. 242-283, 1969.

Scriven, M., The methodology of evaluation. In *Perspectives of curriculum evaluation,* Ralph W. Tyler, Robert M. Gagne, Michael Scriven (eds.). Chicago, Ill.: Rand McNally & Co., p. 39-83, 1967.

Stake, R.E., The countenance of educational evaluation. *Teachers College Record.* April, 1967, 68(7): 523-540.

Stufflebeam, D.L., Toward a science of educational evaluation. *Educational Technology.* July 30, 1968, 8: 5-12.

Suchman, E.A., Principles and practice of evaluative research. In *An introduction to social research,* John T. Doby, (ed.). N.Y.: Appleton-Century-Crofts. p. 327-351, 1967.

APPENDIX A

GLOSSARY

Activities – Work effort involving time and resources required to complete a task or treatment to a given level of performance

Alternative Strategies – The potential means by which the goals of a project could be met

Constraints – Factors in the environment which limit the scope and results of objectives (lack of funds, limited availability of specific type teacher)

Evaluation – Delineating, obtaining and providing useful information for judging decision alternatives

Event – A specific, definable, accomplishment in a program, which is recognizable at a particular instant in time

Feedback – Information from evaluation which has implications for future planning

Goals – A general statement revealing assumptions made about expected outcomes of an organized program. Few goals are needed and they should identify a program area, its targets, purpose, expected results and expected completion date.

Implementation – Initial operation of strategy

Inputs – All elements used in the implementation, maintenance, and development of the program

Needs – Areas void of, or weak in services, production, or development

Objectives – Statements written in behavioral terms which describe the results of planned activities and events

Administrative Objectives are necessary for the establishment, organization and maintenance of the human and technological systems in each project. A project just beginning would probably have many of these objectives (to hire staff, develop curriculum, implement parent program).

Outcome Objectives reveal the specific behaviors with which the program is to deal and indicate expected results. Like administrative objectives, these reflect the choice of strategies the project has made. Whereas administrative objectives are related to the collection, allocation and use of resources, outcome objectives reflect what target behavior is to be affected by those resources and in what direction.

Output – Results of activities and events reported in terms of productivity, development, and sentiments

Rationale – Statements of philosophical, psychological, theoretical, research and pragmatic reasons for the implementation of a program

Resources – The human, technological and organizational materials available for use

Selection Criteria – Bases for the selection of a particular strategy

Strategy – A "plan of attack", a method or procedure for determining what set(s) of activities will be utilized

Targets – Those individuals, organizations or groups which a project objective purports to effect

APPENDIX B

EXAMPLES

OF GOALS, OBJECTIVES, STRATEGIES, AND EVALUATION

EXAMPLE 1

GOAL	OBJECTIVES	STRATEGY	EVALUATION
The project will actively attempt to encourage and create replication of its philosophy, programs, and components of programs.	To increase the community support of preschool education by disseminating information on the philosophy, of the project, success with young children, and its potential worth to the total community.	Weekly ½-hour T.V. show featuring supportive parents and other local persons. Bi-monthly news releases which emphasize human interest success stories. Workshops given to local businessmen and political leaders emphasizing the cost-effectiveness of the preschool approach.	A questionnaire on attitudes toward, and support for preschool education to be given to a random sample of 150-200 local citizens at the beginning of the project and yearly thereafter.

EXAMPLE 2

GOAL	OUTCOME OBJECTIVES	TREATMENT STRATEGY	EVALUATION
The model project through its Parent Program Information Exchange, will increase parents' knowledge about and acceptance of, their child.	By the end of the first year of the Parent Program, parents enrolled in the program will increase their knowledge of child growth and development by 30%. By the end of the second year of the project, parents' long range expectations for their handicapped children will shift in a more realistic direction.	Group meetings between staff and parents in which the continuous growth and development of the child is discussed and the program is explained by the staff Periodic meetings planned and led by parent members in which they discuss their children, present and future	Increase in knowledge of growth and development is measured by a criteria-referenced pre and post tests. Long-range expectations are assessed by pre and post written expectations by parents and judged independently by two project staff members having daily interaction with the children.

EXAMPLE 2 (con't.)

GOAL	OUTCOME OBJECTIVES	TREATMENT STRATEGY	EVALUATION
Project's Parent Program will reduce anxieties caused by fear or guilt feelings due to the pressure of a handicapped offspring in the family.	To reduce, by the end of the second year of the project, anxiety by a significant amount in 90% of the parents.	Parent group discussion in which parents discuss their efforts to help their child on the problems they have encountered in such effort Social worker assigned and available to each parent for two hours a week for individual counseling.	Records will be kept listing parents who participate and their time of involvement. Anxiety levels will be measured by a scale (the IPAT 8-Parallel Form Anxiety Battery) as the parents enter the program and at the end of the second year of participation.

APPENDIX C

ADDITIONAL MATERIAL

ON GOALS AND OBJECTIVES

EXAMPLE 1

DISTINCTION BETWEEN GOALS AND OBJECTIVES

GOALS	OBJECTIVES
Show general intent and direction	Some specific intentions with measurable indices and time limits
The project will improve language development in young handicapped children The parent program will increase parental involvement with children	To improve, beyond normal expectations, the receptive vocabulary and complexity of expression in retarded children in our center by June 1, 1973 To increase over baseline performance parental verbal interaction (non-hostile) with child by June 1, 1973

EXAMPLE 2

DISTINCTION BETWEEN
ADMINISTRATIVE OBJECTIVES
AND OUTCOME OBJECTIVES

ADMINISTRATIVE OBJECTIVES	OUTCOME OBJECTIVES
Useful for program management and progress reports	Represent final statements of expected benefits from the project. Final report materials
Counseling group for parents that meets once a month during 1973 To hire three qualified speech teachers and two aides to deliver service to the children by May 1, 1973	To increase parents' personal, non-hostile interactions with their children by 25% over baseline by June 1, 1973 To improve by a statistically significant amount the expressive language skills of children during this school year

EXAMPLE 3

DIMENSIONAL OVERVIEW OF GOALS AND OBJECTIVES

	GOALS	ADMINISTRATIVE OBJECTIVES	OUTCOME OBJECTIVES
TIME SPAN	Expansive (Years)	Brie (Months)	Moderate (1 year)
CONTENT	Reveals assumptions made about the future effect of project's program treatment	Reveals events which must occur before program outcome can be achieved	Reveals behavior or attitude changes which are a result of program treatment
EVALUATION	Expert review	Frequency count "Yes/no" Log Check list Criterion reference	Psychological tests Center-made tests Criterion-referenced tests Frequency count Testimony
NUMBER	Few (2-3)	Many (10-20)	Several (4-6)

EXAMPLE 4

SAMPLE STRUCTURE FOR A GOAL

GOAL (Model)

The _____ Project through its
(Title)

_____ Program for _____
(Descriptors) (Whom)

will _____ _____
(Action Verb) (What) (For What)

_____.
(General Purpose)

GOAL (Example)

The Newton Project through its Developmental Training Program for exceptional foster children will
(Title) (Descriptors) (Whom)

increase the developmental level of project children so that the children remain in the foster home.
(Act. Vb.) (What) (For What General Purpose)

VERBS USED WITH GOALS

provide	increase	enable	offer
promote	decrease	change	train

EXAMPLE 5

SAMPLE STRUCTURE FOR ADMINISTRATIVE OBJECTIVE

ADMINISTRATIVE OBJECTIVE (Model)

To _____ _____ _____
(Implementating Verb) (What) (For

_____ _____
What Outcome) (By When)

ADMINISTRATIVE OBJECTIVE (Example)

To develop a continium of programs to meet the learning needs of children served by the project (0-6
(Impl. vb.) (What) (For What

years of age) by June 1, 1972.
Outcome) (When)

VERBS USED WITH ADMINISTRATIVE OBJECTIVES

coordinate	interview	create	prepare
organize	construct	initiate	devise
investigate	identify	refine	develop
establish	individualize	plan	locate
obtain	compose	implement	

EXAMPLE 6

SAMPLE STRUCTURE FOR OUTCOME OBJECTIVE

OUTCOME OBJECTIVE (Model)

To _____ _____ _____
(Action Verb) (What Behavior) (Of Whom)

_____ _____
(With What Specific Results) (By When)

OUTCOME OBJECTIVES (Example)

To increase the expressive language of each child so that expressive language is within four months of his
(Act. vb.) (What Behavior) (Of Whom) (With What General and/or Specific

receptive language level by the end of the year.
Results) (By When)

VERBS USED WITH OUTCOME OBJECTIVES

involve	stimulate	acquaint	reduce
inform	change	improve	liberalize
access	increase	prevent	decrease